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U. S. Department of Agriculture - Forest Service
CENTRAL STATES FOREST EXPERIMENT STATION
In Cooperation With
Ohio Agricultural Experiment Station
OHIO DIVISION OF FORESTRY

Technical Note 37.

October 1, 1941.

VOLUME TABLE $\frac{1}{2}$
for
BLACK GUM or BLACK TUPELO (*Nyssa sylvatica*)
Holmes County, Ohio

Merchantable Stem to a Variable Top Diameter							INTERNATIONAL Rule ($\frac{1}{4}$ " Kerf)	
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height						Top d.i.b. at merchantable limit	Basis in trees
	1 log	2 logs	3 logs	4 logs	5 logs	6 logs		
	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches	Number
7	9	15					6.1	-
8	13	21	27				6.3	4
9	18	28	37				6.5	4
10	23	37	48	59			6.7	4
11	29	47	62	75			6.9	7
12	37	59	77	93			7.1	4
13		72	94	115			7.3	4
14		87	114	139			7.6	2
15		104	136	166	192		7.9	6
16		123	161	195	227		8.1	5
17		143	183	228	265		8.5	3
18		166	218	264	307		8.9	4
19			250	303	352		9.3	4
20			285	346	402		9.8	4
21			323	392	455	514	10.4	3
22			364	442	513	580	11.0	4
23			403	495	575	649	11.6	4
24			455	552	641	724	12.2	1
25			505	613	711	804	12.9	5
26			559	678	787	889	13.6	2
27				746	867	980	14.4	1
28				819	952	1075	15.1	1
29				896	1041	1176	15.9	1
30				978	1135	1283	16.7	1
31					1235		17.4	-

Basis in trees-- number	5	7	26	19	19	3	-	78
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$\frac{1}{2}$ Trees climbed and measured by personnel of Work Projects Administration Official Project 65-1-42-166 - "the Ohio Woodland Survey." Measurements taken at 12-foot log lengths above a 1.0-foot stump height. Scaled as 12-foot logs, and additional shorter top logs; top sections less than 8 feet in length scaled as fractions of an 8-foot log. Table prepared in 1941 by the equation method. Multiple correlation coefficient (R) was .991. Standard error of estimate is approximately 17% of estimated volumes. Block shows limits of basic data.

The total estimated gross volume of single black gum trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the elements comprising cull combined with local experience of millmen as regards losses from rot, shake, etc., in utilizing this species.

Floyd A. Johnson

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